

WHAT IS CLAIMED IS:

1. A method of dynamic personalized reading instruction comprising the steps of:

- determining a first word recognition level;

- displaying words based on the determined word recognition level from a set of words classified by word recognition levels;

- determining word recognition errors based on comprehension of a word;

- determining a second word recognition level based on the determined word recognition errors.

2. The method of claim 1, wherein the first word recognition level is determined based on at least one of: age, scholastic grade and performance and an interactive test sequence.

3. The method of claim 1, wherein at least one of a set of words in the set of words classified by word recognition level is associated with a comprehension aid.

4. The method of claim 3, wherein the comprehension aid is a human sensible explanation of the concept of at least one classified word.

5. The method of claim 4, wherein the human sensible explanation of the concept is at least one of: a graphic icon, an animation, audio information and video information.

6. A method of dynamic personalized reading instruction comprising the steps of:

- determining a text;

- analyzing the text based on a theory of discourse analysis;

- determining a first user reading level;

- displaying a grammatical tunable text summary based on the determined reading level;

- determining comprehension of the text; and

- determining a further user reading levels based on the comprehension and reading level.

7. The method of claim 6, further comprising the steps of:

displaying salient information from the grammatical tunable text summary based on at least one of: a user request, determined reading speed, determined comprehension level.

8. The method of claim 7, wherein the text is analyzed based on at least one of: the Discourse Structures Theory, Linguistic Discourse Model, Rhetorical Structure Theory, Systemic Functional Grammar and Tagmemics.

9. The method of claim 7, wherein a first user reading level is determined based on at least one of: age, academic grade and performance and interactive test performance.

10. The method of claim 9, wherein at least one comprehension aid is associated with at least one portion of the grammatical tunable text summary.

11. The method of claim 10, wherein the at least one comprehension aid is a human sensible concept explanation for at least one of the portions of the grammatical tunable text summary.

12. The method of claim 11, wherein the at least one comprehension aid includes at least one of: a graphic icon, an animation, audio information and video information.

13. A method of combined word and sentence level dynamic personalized reading instruction comprising the steps of:

providing word level dynamic personalized instruction comprising the steps of:

determining a first word recognition level;

displaying words based on the determined word recognition level from a set of words classified by word recognition levels;

determining word recognition error based on comprehension of a word;

determining a second word recognition level based on the determined word recognition errors;

providing sentence level dynamic personalized instruction comprising the steps of:

determining a text;

analyzing the text based on a theory of discourse analysis;

determining a first user reading level;

displaying a grammatical tunable text summary based on the
determined reading level;

determining comprehension of the text;

determining a second user reading level based on the

5 comprehension and reading level;

14. A system for dynamic personalized reading instruction comprising:
a controller;

a memory for storing words and comprehension aids classified by word
recognition levels;

10 a word recognition level determining circuit for determining a word
recognition level;

a word display circuit for displaying words from the stored words
based on the determined word recognition level;

15 a recognition error determining circuit for determining recognition
errors;

a comprehension aid display circuit for displaying comprehension aids
based on determined recognition errors;

a word recognition level adjusting circuit adjusting the word
recognition level based on the determined recognition errors.

20 15. The system of claim 14, wherein a first word recognition level is
determined based on at least one of: age, scholastic grade and performance and
an interactive test sequence.

25 16. The system of claim 14, wherein at least one of a set of words in the set
of words classified by word recognition level is associated with a
comprehension aid.

17. The system of claim 16, wherein the comprehension aid is a human
sensible explanation of the concept of at least one classified word.

30 18. The system of claim 17, wherein the human sensible explanation of the
concept is at least one of: a graphic icon, an animation, audio information and
video information.

19. A method of dynamic personalized reading instruction comprising:
a memory;
an input/output circuit for loading a selected text into the memory;
a discourse analysis circuit for analyzing the text;

a grammatical tunable text summary generating circuit for determining a grammatical tunable text summary of the analyzed text;

a word display circuit for displaying words from the stored words based on the determined word recognition level;

a recognition error determining circuit for determining recognition errors;

5 a comprehension aid display circuit for displaying comprehension aids based on determined recognition errors;

a word recognition level adjusting circuit adjusting the word recognition level based on the determined recognition errors;

a sentence level dynamic personalized instruction circuit comprising:

10 an input/output circuit for loading a selected text into the memory;

a discourse analysis circuit for analyzing the text;

a grammatical tunable text summary generating circuit for determining a grammatical tunable text summary of the analyzed text;

15 a text determining circuit for determining display text based on a determined reading level information;

a comprehension question generating circuit for generating comprehension questions based on the grammatical tunable text summary;

20 a controller for determining a new reading level based on at least one of the determined comprehension and reading speed.

27. A method of dynamic personalized reading instruction comprising the steps of:

determining a text in a first language;

analyzing the text based on a theory of discourse analysis;

25 determining a second language reading level;

displaying a grammatical tunable text summary based on the determined reading level;

determining comprehension errors for the text;

30 displaying comprehension aids based on determined comprehension errors; second language and previously determined typical second language errors; and

determining a second user reading level based on the comprehension and reading level.

28. A carrier wave encoded to transmit a control program usable for dynamic personalized reading instruction to a device for executing the control program, the control program including instructions comprising:

instructions for determining a first word recognition level;

instructions for displaying words based on the determined word recognition level from a set of words classified by word recognition levels;

instructions for determining word recognition errors based on comprehension of a word;

instructions for determining a second word recognition level based on the determined word recognition errors.

29. A carrier wave encoded to transmit a control program usable for dynamic personalized reading instruction to a device for executing the control program, the control program including instructions comprising:

instructions for determining a text;

instructions for analyzing the text based on a theory of discourse analysis;

instructions for determining a first user reading level;

instruction for displaying a grammatical tunable text summary based on the determined reading level;

instructions for determining comprehension of the text;

instructions for determining a further user reading levels based on the comprehension and reading level.

30. A computer readable storage medium, comprising, a computer readable program code embodied on the computer readable storage medium, the computer readable program code usable to program a computer to perform dynamic personalized reading instruction further comprising the steps of:

instructions for determining a first word recognition level;

instructions for displaying words based on the determined word recognition level from a set of words classified by word recognition levels;

instructions for determining word recognition errors based on comprehension of a word;

instructions for determining a second word recognition level based on the determined word recognition errors.

31. A computer readable storage medium, comprising a computer readable program code embodied on the computer readable storage medium, the computer readable program code usable to program a computer to perform dynamic personalized reading instruction further comprising the steps of:

- 5 instructions for determining a text;
- instructions for analyzing the text based on a theory of discourse analysis;
- instructions for determining a first user reading level;
- instruction for displaying a grammatical tunable text summary based
- 10 on the determined reading level;
- instructions for determining comprehension of the text; and
- instructions for determining a further user reading levels based on the comprehension and reading level.

0937420 "4401
T.04T.T.T. 02428660